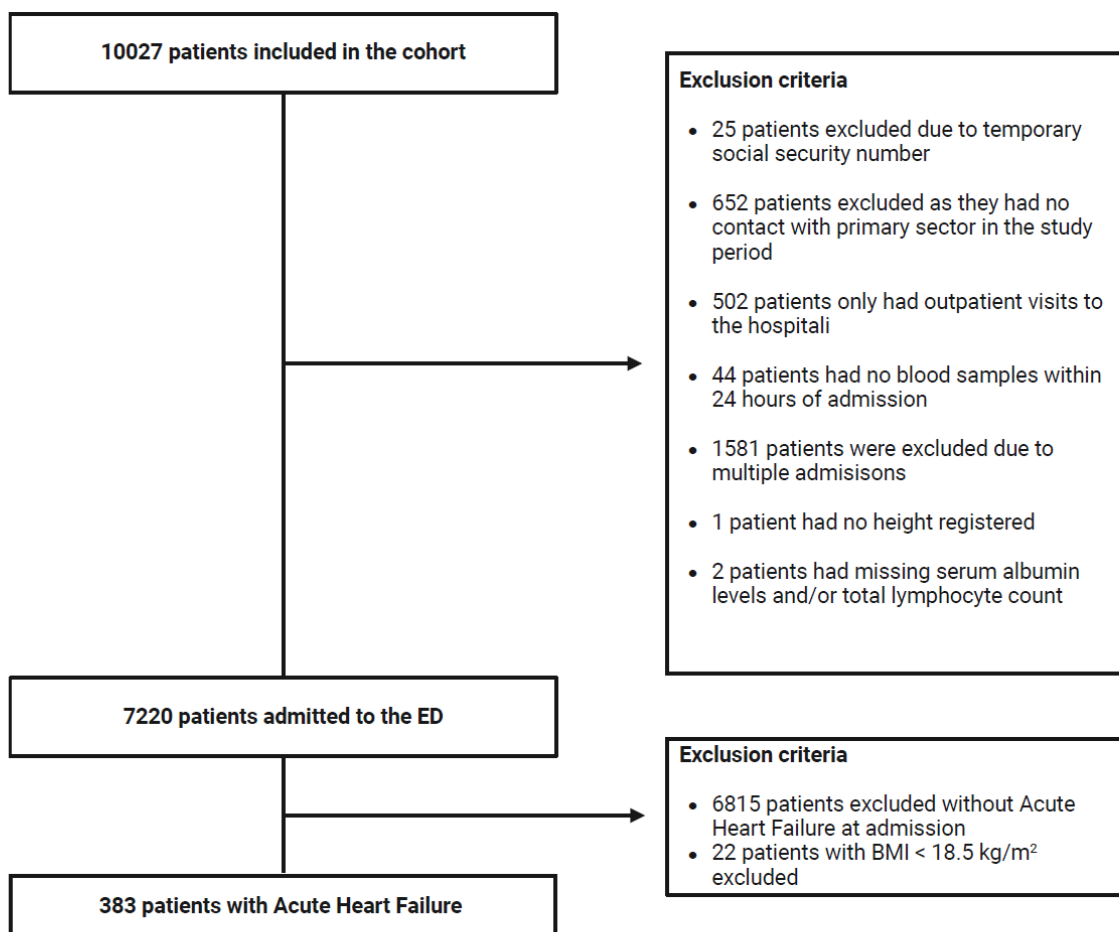


## Supplementary material

### Supplementary Figure 1: Flow chart of the study population and reasons for exclusion



### Supplementary table 1: Cox regression analysis of 1-year mortality in AHF patients stratified only by PNI

Subgroups	Unadjusted			Adjusted		
	HR	95% CI	P	HR	95% CI	P
Low-PNI	Ref			Ref		
High-PNI	0.51	0.37-0.69	<0.001***	0.64	0.44-0.94	0.024*

[Caption – Supplementary Table 1: Adjusted for age, sex, confirmed Coronavirus disease 2019 (COVID-19) infection, carbamide, eosinophils, hemoglobin, soluble urokinase plasminogen activator receptor (suPAR), C-reactive protein (CRP) and body mass index (BMI).

AHF, acute heart failure; PNI, prognostic nutritional index; Ref, reference; HR, Hazard ratio; CI, Confidence interval; \*P < 0.05; \*\*P < 0.01; \*\*\*P < 0.001]

**Supplementary table 2:** Cox regression analysis of 1-year mortality in AHF patients and the interaction of PNI- and BMI-groups

Variable	Coefficient	HR	95% CI	P
High-PNI**	-0.22963	0.79	0.50-1.27	0.34
BMI 25-29.9 kg/m <sup>2</sup> ***	0.25263	0.51	0.37-0.69	0.32
BMI ≥ 30 kg/m <sup>2</sup> ***	0.06681	1.07	0.53-2.14	0.81
High-PNI and BMI 25-29.9 kg/m <sup>2</sup>	-0.59061	0.55	0.28-1.12	0.098
High-PNI and BMI ≥ 30 kg/m <sup>2</sup>	-1.02917	0.36	0.16–0.82	0.015*

[Caption – Supplementary Table 2: Cox proportional hazards model output examines the relationship between survival and the interaction of PNI- and BMI groups.

AHF, acute heart failure; BMI, body mass index; PNI, prognostic nutritional index; HR, Hazard ratio; CI, Confidence interval; \*P < 0.05; \*\*Compared to Low-PNI; \*\*\*Compared to normal BMI group]